

In the Drawing

Pending approval of the Examiner, Applicants' attorney would like to amend the drawings in the above-identified application as follows:

Figure 19, kindly add reference numeral 70.

A separate letter to the Official Draftsperson in accordance with MPEP 608.02(r) is enclosed herewith. The undersigned will have the drawings corrected in an approved manner upon receiving the Examiner's approval of the above requested corrections.

Remarks

The Office Action of March 27, 2001, Paper No. 7, was carefully reviewed and to highlight the distinctions of the above referenced invention over the prior art of record as interpreted by the Examiner, the specification and claims were amended as set forth herein. Claims 1 through 28 were amended to place all of the claims remaining in the application in condition for allowance. The specification was amended to correct matters of a grammatical and typographical nature in response to the Examiner's objection to the disclosure as having informalities requiring submission of a substitute specification. No new matter was presented and such amendments are deemed unobjectionable. Entry thereof is respectfully requested. It is also respectfully requested that the Examiner reconsider the present application and claims as currently pending in view of the following remarks.

In the Office Action, the Examiner objected to Claims 7 through 28 under 37 CFR §1.75(c) as being in improper multiple dependent form. The undersigned, however, respectfully asserts that such objection is rendered moot by the Preliminary Amendment that was filed concurrently with the subject application, which Preliminary

Amendment, evidently, the Examiner did not have the opportunity to consider.

Accordingly, Applicants' attorney is enclosing a copy of such Preliminary Amendment for the Examiner's convenience and respectfully requests withdrawal of the objection to Claims 7 through 28 under 37 CFR §1.75(c).

Similarly, it is evident that the Examiner did not consider the Information Disclosure Statement (IDS) that also was filed concurrently with the subject application.

Again, Applicants' attorney is enclosing a copy herewith for the Examiner's convenience (only French Patent 1,151,191 is included as the Examiner obviously has the Turoczi, Jr. reference). Accordingly, it is respectfully requested that the Examiner enter the prior art references listed on the originally filed IDS. Applicants' attorney is also enclosing proof of filing of the Preliminary Amendment and the IDS.

The Examiner rejected Claims 1 through 28 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Specifically, the Examiner pointed out that in Claim 1 "surface" lacks antecedent basis, and that the term "similar colour" is indefinite. While Applicants are of the opinion that Claims 1 through 28 are in fact definite, Applicants have amended the claims to further clarify the claimed invention as suggested by the Examiner. Accordingly, Applicants assert that no new matter has been added, that the claims do particularly point out and distinctly claim the subject matter that Applicants regard as the invention, and that the amended independent claims as well as the claims depending therefrom are now allowable. Accordingly, reconsideration and withdrawal of the rejection of Claims 1 through 28 under 35 U.S.C. §112 are respectfully requested.

STILL NOT
FOUND

FOUND
(NOT ENTERED)

The Examiner rejected Claims 1, 2, and 6 under 35 U.S.C. §102(b) as being anticipated by Woolson, U.S. Patent 1,692,145, and further rejected Claims 1 and 5 as being anticipated by Turoczi, Jr., U.S. Patent 3,786,850. The undersigned attorney respectfully traverses the Examiner's rejections of independent Claim 1 and dependent Claims 2, 5, and 6 in view of the amendments presented herein and submitted herewith as well as the following argument for the reason that the claims are not anticipated by either Woolson or Turoczi, Jr.

The test for determining if a reference anticipates a claim, for purposes of a rejection under 35 U.S.C. §102, is whether the reference discloses all the elements of the claimed combination, or the mechanical equivalents thereof, functioning in substantially the same way to produce substantially the same results. As noted by the Court of Appeals of the Federal Circuit in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection under 35 U.S.C. §102, the Court stated:

“Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.”

Applicants' amended independent Claim 1 basically requires:

A balancing device for a tire...comprising:

a **case**...;

a **single balancing weight...enclosed in said case...**

...said case having **means for mounting said case to said tire....**

Dealing first with Woolson, it is significant that the Examiner did not assert anything about what Woolson discloses when rejecting the claims. This is probably because the Woolson disclosure is rather sparse and somewhat unclear. In any case, a single balancing weight is not disclosed in Woolson. Rather, Woolson discloses articulated

links necessitating no less than a plurality of weights. Therefore, Woolson does not meet the limitation of a single weight.

Furthermore, Woolson does not disclose anything of any kind being enclosed in a case. Firstly, there is no case disclosed in Woolson. Woolson discloses a “patch-like member” with “perforations” having the articulated links threaded and distributed therethrough. At best, the patch-like member of Woolson is some kind of conduit through which the links are threaded, but in no way meets the definition of a case. Secondly, the articulated links are not enclosed within the patch-like member. The term “enclosed” is defined as: closed in or surrounded. The patch-like member of Woolson is not at all closed in or surrounded, because the weight can “have portions added thereto or taken therefrom” as exemplified in Figure 3 wherein articulated links can extend outside of the patch-like member. Therefore, the patch-like member of Woolson must be open such that the articulated links can be exposed, thereby also exposing the inside of the patch-like member.

Finally, Woolson does not disclose means for mounting a case to a tire. Rather, Woolson discloses vulcanizing the patch-like member and articulated links to the side of the tire casing. Vulcanizing means the process of treating rubber with chemical cross-linking agents for hardening, etc. Woolson has confused the meaning of vulcanization and it is unclear just how, or even if, the patch-like member is mounted to the tire. There is, however, some reason to infer that Woolson meant vulcanized to mean forming rubber to make a tire. In this case, the disclosure would suggest that the patch-like member is integrally manufactured into the side of the tire, such that the patch-like member has no separate surface of its own that affixes to the tire. This would explain the complete absence of any disclosure regarding any interfacing surfaces of the tire and patch-like

member. At best, Woolson leaves us with wild conjecture and no definite disclosure. Accordingly, Woolson fails to disclose each and every element of Applicants' independent claims.

Dealing now with the wheel balancing weights of Turoczi, Jr., there is no disclosure whatsoever regarding the weights being enclosed in a case. Firstly, there is no case of any kind whatsoever disclosed in Turoczi, Jr. Secondly, the weight of Turoczi, Jr. is not enclosed by anything. Rather, the weight is composed of a solid mass of rubber that is mounted to the sidewall of a tire, using epoxy resin. In Turoczi, Jr., there is no case, and there is no enclosure; therefore Turoczi, Jr. fails to disclose all of the elements of Applicants' claims.

Based upon the above argument, Applicants respectfully submit that neither the Woolson nor the Turoczi, Jr. references disclose each and every element arranged as in the claim of any of Applicants' claims. Therefore, in applying the test for anticipation as set forth in *Lindemann*, neither Woolson nor Turoczi, Jr. anticipates any of Applicants' claims. Accordingly, reconsideration and withdrawal of the rejection of Claims 1, 2, 5, and 6 under 35 U.S.C. §102(b) are respectfully requested.

The Examiner rejected Claims 3 and 4 under 35 U.S.C. §103 as being unpatentable over Woolson. The Examiner considers those of ordinary skill in the art to know that steel, and zinc and aluminum alloy would perform well as balancing materials.

Applicants' attorney respectfully traverses each of the 35 U.S.C. §103 rejections set forth herein for the reason that Applicants' invention is not an obvious improvement over the prior art. It is respectfully asserted that Applicants' invention is not obvious in view of Woolson taken alone or in view of Woolson in any permissible

combination with Turoczi, Jr. or any of the other prior art references of record in view of the arguments as set forth below.

With respect to the rejections under 35 U.S.C. §103, it is noted in MPEP Section 706 that the standard of patentability to be followed in the examination of a patent application is that which was enunciated by the Supreme Court in *Graham v. John Deere*, 148 USPQ 459 (1966), where the Court stated:

“Under Section 103, the scope and the content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved.”

Accordingly, to establish a prima facie case of obviousness, the Patent Office must; (1) set forth the differences in the claim over the applied references; (2) set forth the proposed modification of the references which would be necessary to arrive at the claimed subject matter; and (3) explain why the proposed modifications would be obvious. To satisfy step (3) above, the Patent Office must identify where the prior art provides a motivating suggestion, inference or implication to make the modifications proposed in step (2) above. *In re Jones*, 21 USPQ2d 1941 (Fed. Cir. 1992). Prior to discussing the unobviousness of the present invention over the prior art, the teachings of the prior art references and the differences, novelty, and unobviousness of the present invention over the prior art references will be set forth.

Woolson is directed to the problem of imbalance in a tire casing. To overcome this problem Woolson teaches a way to inherently balance a tire casing so that the tire and wheel assembly may not be thrown out of balance in any position at which the casing is placed on a rim of the wheel.

To accomplish the teachings, Woolson discloses a tire casing having patch-like members vulcanized to the side of the tire casing. Each patch-like member is provided

with perforations through which a plurality of articulated links of weight material are threaded. Then, the perforations are vulcanized around the articulated links to fix the links with respect to the tire casing. It is important to point out that Woolson is completely silent regarding teachings of enclosing a single balance weight inside of a case.

Turoczi, Jr., is directed to the problems associated with clamping lead balance weights to a wheel rim. Specifically, Turoczi, Jr. mentions their unseemly appearance and deleterious effects on the wheel rim. Accordingly, Turoczi, Jr. teaches using indicia-shaped balance weights to more attractively balance a tire.

Turoczi, Jr. accomplishes this objective by providing a balanced wheel having a plurality of balance weights affixed to the sidewalls of a tire. Each balance weight is composed of a solid mass of rubber, is shaped as a letter or a logo, and is affixed to the tire with rubber cement. Reference the Background section of Applicants' application for various problems and disadvantages of the Turoczi, Jr. balance weights. Note that there is absolutely no teaching or suggestion in Turoczi, Jr. of using a balance weight enclosed in a case. Instead, Turoczi, Jr., specifically teaches use of a solid mass of rubber affixed to the sidewall of the tire.

In contrast, Applicants' invention is directed to the prior art problem of damage to a wheel rim associated with placing balance weights on the rim. Applicants teach balancing a wheel and tire assembly by attaching a balancing device to the sidewall of the tire.

Applicants' invention discloses a balancing device having a balancing weight enclosed within a case that is fixed to the sidewall of the tire. The case is composed of a material that matches the color of the tire so as to blend together therewith. The balancing weight is preferably composed of lead, but can be composed of almost any

material, and a standard balancing weight can also be used. The case is molded around the balance weight, preferably by duplicate molding. With regard to a device that involves enclosing a wheel balance weight within a casing and then adhering the casing to the tire, Applicants perform this for the very first time. Thus, standard balance weights or balance weight material can be affixed to a tire and wheel assembly in a discrete and easy manner. Until now, no one ever taught or suggested such an effective, attractive, and economical invention for balancing a tire and wheel assembly, much less actually practiced it. According to the discussion above with respect to the §102 rejections, there are patentably significant differences between Applicants' invention and any combination of Woolson and Turoczi, Jr.

Therefore, Applicants request reconsideration of the rejection under 35 U.S.C. §103 as applicable to Claims 3 and 4, for the following reasons. The differences between Applicants' invention and the prior art references cited by the Examiner are quite clear, as set forth above in the §102 discussion. As set forth below, one skilled in the art would have no basis for combining the references. Moreover, any such combination simply would not result in Applicants' invention. Finally, Applicants' invention solved a general long-felt but unsolved need in the prior art.

One skilled in the art would have no basis for combining the teachings of Woolson and Turoczi, Jr. The solution taught by Woolson is directed to a problem totally different than that of Applicants' invention. For example, Woolson is directed to the problem of correcting imbalance in a tire casing alone. In contrast, the Woolson reference does not mention the potential problem of damage to a rim of a wheel from clamping a balance weight thereto. Absent a recognition of this problem, it would be impossible for its solution to be obvious to any one. The basic conceptual differences between Applicants'

invention, as claimed, and the prior art is that Applicants' invention points out a problem and teaches a solution to a problem that was not present, much less recognized, by Woolson.

Although Turoczi, Jr. identifies a similar problem, that is, an unsightly balance weight attached to a rim of a wheel, the Turoczi, Jr. solution is completely different than that proposed by Applicants as set forth in the claims. For example, Turoczi, Jr. teaches affixing to a tire, solid blocks of rubber in the form of indicia. Therefore, the reference actually teaches away from Applicants' invention, since Turoczi, Jr. abandons the practice of using lead (or any other material besides rubber) for balance weights. Turoczi, Jr. also teaches away since it specifies incorporating decorative or light-reflective material on the outside surface of the balance weights thereby drawing attention to the balance weights. This is unlike Applicants' invention in which it is desirable to draw attention away from the balance weight by having the balance weight blend in with the tire to which it is affixed.

Therefore, it is respectfully submitted that but for the disclosure made by the Applicants in the application there is no teaching, suggestion, or motivation whatsoever to take Woolson alone or in combination with Turoczi, Jr. to in any way obviate Applicants' invention as taught by the claims presently pending in the application. Not a single word in the references teaches or suggests a balance weight enclosed in a case that is mounted to a tire. It is well settled patent law that the mere fact that a disclosure can somehow be combined with other references does not make that combination obvious unless the prior art contains some suggestion of the desirability for combining the prior art references. In other words, to satisfy step (3) of the prima facie case of obviousness above, there must be "some teaching, suggestion, or motivation to combine the references," as recently

summarized by *In re Rouffet*, 149 F.3d 1350, 1355-56, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998).

In the present case, the Examiner will not be able to make a proper *prima facie* showing of obviousness since the Examiner will not be able to show how the prior art suggests the desirability of the combination. Here, the prior art contains absolutely no suggestion whatsoever for combining the references to teach the invention as claimed according to Applicants' disclosure. In other words, there is nothing in the references alone or together that suggest the claimed invention as a solution to the problem of damage to a tire rim from clamping a balance weight thereto and, in fact, Applicants invented a solution to that problem.

Accordingly, Applicants respectfully assert that the Examiner would have to use improper hindsight reconstruction in an attempt to obviate Applicants' invention after having the benefit of reading Applicants' application. Absent recognition of the problem faced by the Applicants, the prior art cannot possibly suggest, singularly or in combination, a solution as novel as Applicants' invention. While the modifications that are made to the references to allegedly provide the subject invention may be relatively simple, once the advantages for making such changes are taught by Applicants' disclosure, such disclosure cannot be used against them in this regard. One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988).

The combination simply would not result in Applicants' invention. Assuming, *arguendo*, that it is possible to combine Woolson with Turoczi, Jr. in an attempt to obviate Applicants' invention, it is clear from the teachings set forth in the prior art references that the combination would not result in Applicants' invention and would in fact

require extensive additional structure in an attempt to acquire similar results. At best, the combination of Woolson and Turoczi, Jr. would result in open patch-like members vulcanized to the side of a tire, wherein articulated link weights are vulcanized therethrough, and the patch-like members are in indicia form. But, the combination would not result in a balance weight enclosed within a case that is mounted to a tire, since the combination would still require the following elements: a single balance weight instead of multiple links, the balance weight being enclosed in a case, wherein at least one surface of the case is mounted to a tire. In other words, the resulting combination of references would not result in the balancing device as per the present invention. Therefore, even if the combination were legally justified, Applicants' claims would still have novel and unobvious physical features over the proposed combination. The combination of the prior art references does not disclose all of the claimed features of Applicants' invention and, therefore, the combination would necessarily constitute a different structure and different result than the claimed invention. In summary, the resulting combination of references would not motivate one of ordinary skill in the art to use an open patch-like member in indicia form with linked weights therein and, therefore is not combinable to obviate Applicants' invention as presently claimed.

Moreover, even if the references could be combined the prior art references actually teach away from such a combination. In providing a balance weight, Woolson teaches an open patch-like member having linked weights throughout, and Turoczi, Jr. teaches solid hunks of rubber in indicia format. The combination could not result in achieving both objectives of using a solid balance weight and using an open balance weight. Thus, there is no motivation to combine these references.

Finally, Applicants solved a general long-felt but unsolved need in the prior art of tire and wheel assembly-balancing weights. Improvement in effectiveness, reduction of part count and part complexity, as well as corresponding reduction in the manufacturing complexity of balancing weights is an ongoing need in this mature and competitive industry. Up until Applicants' invention, no one has recognized, much less suggested or used, a balancing weight that has all the attendant advantages of mounting a standard balance weight, or at least a portion thereof, to the sidewall of a tire in a discrete and economical fashion. Additionally, the Woolson reference is nearly eighty years old and the Turoczi, Jr. patent has been expired for many years. Therefore, Applicants' invention is not obvious, or else it would have long been proposed already, since it is so effective and inexpensive and since there has been ample opportunity to combine the references. Therefore, it is Applicants' invention that addresses and makes another significant step toward improving wheel balancing technology.

Accordingly, Applicants' invention is an unobvious improvement over the prior art and not an obvious modification of any of the references cited by the Examiner. When viewed singularly or collectively, none of the prior art references teach a wheel balancing device incorporating a balance weight enclosed in a case that is mounted to a tire. Reconsideration and withdrawal of the rejection under 35 U.S.C. §103 are, therefore, respectfully requested.

In view of the foregoing remarks, the undersigned attorney respectfully submits that the pending independent and dependent claims are in proper form, define patentably over the prior art, and are clearly allowable. Applicants' attorney, therefore, respectfully requests that the Examiner's rejections under 35 U.S.C. §§102 and 103 be withdrawn and that a formal Notice of Allowance be issued therefor.

The prior art made of record but not relied on, namely Tibbets, Periat, Skidmore '941, and Skidmore '648, has been reviewed with interest. It is respectfully submitted that the present invention defines patentably thereover.

In accordance with 37 CFR §1.121, a clean copy of the claims as currently pending in the application, omitting all bracketed text and underlining, is included herewith as Exhibit A.

If the Examiner has any questions with respect to any matter now of record, Applicants' attorney may be reached at (248) 362-1210.

Respectfully submitted,

VANOPHEM & VANOPHEM, P.C.



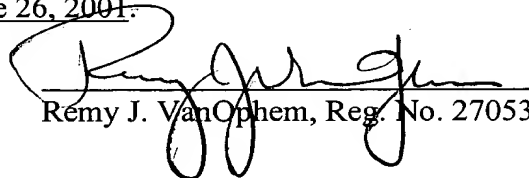
Remy J. VanOphem
Registration No. 27053

755 W. Big Beaver Rd.
Suite 1313
Troy, MI 48084
(248) 362-1210
Attorney Docket No. RSA254A US

Certificate under 37 CFR §1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on June 26, 2001.

Date: June 26, 2001



Remy J. VanOphem, Reg. No. 27053